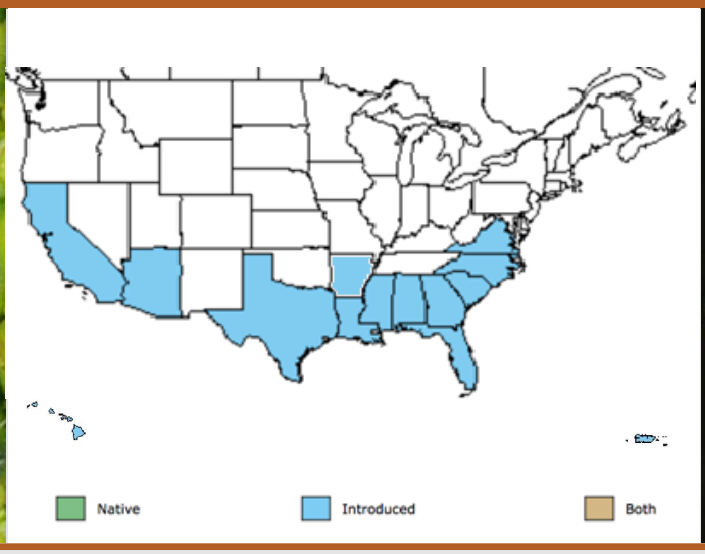
USACE Invasive Plant Species
Best Management Practices

Giant Salvinia (*Salvinia molesta*) - Salviniaceae (Floating Fern)



Habitat & Life History

Annual, perennial forb/herb – OBL – Reproduces by vegetative growth and fragmentation

Integrated Management Strategy Selections

Prevention **Chemical** **Biological** **Mechanical** **Cultural**

PREVENTION

- Prevent invasion by establishing dominant native plants & detecting infestations early

CHEMICAL CONTROL

- Herbicides—carfentrazone, diquat, flumioxazin, fluridone, glyphosate, metsulfuron (ONLY labelled in Louisiana & Texas), penoxsulam
- Use-pattern—spot or broadcast; subsurface possible for fluridone and penoxsulam

*Refer to product label for specific instructions on rate & use-pattern

BIOLOGICAL CONTROL

- Agent—*Cyrtobagus salviniae* (salvinia weevil)
- Rearing/Release—field collection & transport, mass rear in cultures, may require viable plant materials

MECHANICAL CONTROL

- Hand pull, net, rake, seine, floating booms (containment)

CULTURAL CONTROL

- Saline flushes; nutrient abatement; seasonal drawdowns, generally in winter

MANAGEMENT SEQUENCING

- Timing of control methods—apply mechanical (early growth) & chemical control; administer salvinia weevil biocontrol; use maintenance control model which manages populations frequently at low population levels
- Monitoring—monitor and assess if repeat applications if necessary
- Niche-filling/Restoration—establish competitive native vegetation

COMMENTS

- Giant salvinia spreads by daughter plants. Whole plants or fragments are easily transportable & desiccation occurs slowly. Proper plant identification is essential for biological & chemical control since common salvinia (*Salvinia minima*) looks similar.

Updated—2021

Contributors, data sources, documentation @ apcrp.el.erdc.dren.mil